

At page 251, line 1 please delete "Sepharose 4B (Pharmacia)" and insert therefor --

SEPHAROSE 4B, (Pharmacia, Milton Keynes, UK)

At page 251, line 3 please delete "TEL-Sepharose" and insert therefor ~~TEL-SEP~~TEL-SEP

Pharmacia, Milton Keynes, UK--.

At page 251, line 5 please delete "TEL-Sepharose" and insert therefor ~~TEL-SEP~~TEL-SEP

(Pharmacia, Milton Keynes, UK)--.

At page 252, line 2 please delete "TEL-Sepharose" and insert therefor ~~TEL-SEP~~TEL-SEP

(Pharmacia, Milton Keynes, UK)--.

At page 253, line 7 please delete "TEL-Sepharose" and insert therefor ~~TEL-SEP~~TEL-SEP

(Pharmacia, Milton Keynes, UK)--.

At page 258, line 25 please delete "Tween 20, (" and insert therefor --TWEEN 20 (neutral detergent)--.

At page 261, line 11 please delete "Sigma, Poole, UK" and insert therefor --Sigma Chemicals, Poole, Dorset, UK--.

At page 263, line 14 please delete "Sigma, Poole, UK" and insert therefor --Sigma Chemicals, Poole, Dorset, UK--.

At page 264, line 21 please delete "Sigma, Poole, UK" and insert therefor --Sigma Chemicals, Poole, Dorset, UK--.

At page 265, line 8 please delete "Sigma, Poole, UK" and insert therefor --Sigma Chemicals, Poole, Dorset, UK--.

At page 265, line 10 please delete "Thermomax" and insert therefor --THERMOMAX--.

In the claims:

Please cancel claim 44 and amend the claims as follows:

45. (Amended) A method according to claim [44] 145 wherein said [domain] enzyme or fragment is at least 200 amino acids.

46. (Amended) A method according to claim [44] 145 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III

capsid protein surface component of phage fd or its counterpart in another filamentous phage.

47. (Amended) A method according to claim 45 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

48. (Amended) A method according to claim [44] 145 wherein particles formed by said expression are selected or screened to provide an individual displayed polypeptide specific binding pair member or a mixed population of displayed polypeptide specific binding pair members associated in respective particles with nucleic acid encoding said displayed polypeptide specific binding pair member or specific binding pair members, the specific binding pair member or specific binding pair members thus provided having ability to bind a complementary ligand.

53. (Amended) A method according to claim 48 wherein the particles are selected by enzymatic activity of the displayed polypeptide.

60. (Amended) A method of producing nucleic acid encoding a specific binding pair member, the method comprising:

(i) obtaining nucleic acid from a selected or screened particle obtained by a method according to claim 48, said nucleic acid encoding a polypeptide specific binding pair member or a polypeptide chain component thereof; and

(ii) producing from the nucleic acid obtained in step (i) nucleic acid which encodes a derivative specific binding pair member, wherein said derivative specific binding pair member is [provided] produced by [the] addition, deletion, substitution or insertion of one or more amino acids, or by [the] linkage of another molecule, to a polypeptide specific binding pair member or polypeptide chain component thereof encoded by the nucleic acid obtained in step (i).

61. (Amended) A method of producing a specific binding pair member,

the method comprising:

producing said derivative specific binding pair member by expression of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 60 [a] said derivative specific binding pair member.

62.(Amended) A method of producing nucleic acid encoding a specific binding pair member, the method comprising:

(i) obtaining nucleic acid from a selected or screened particle obtained by a method according to claim 49, said nucleic acid encoding a polypeptide specific binding pair member or a polypeptide chain component thereof; and

(ii) producing from the nucleic acid obtained in step (i) nucleic acid which encodes a derivative specific binding pair member, wherein said derivative specific binding pair member is [provided] produced by [the] addition, deletion, substitution or insertion of one or more amino acids, or by [the] linkage of another molecule, to a polypeptide specific binding pair member or polypeptide chain component thereof encoded by the nucleic acid obtained in step (i).

63. (Amended) A method of producing a specific binding pair member, the method comprising:

producing said derivative specific binding pair member by expression of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 62 [a said derivative specific binding pair member].

64. (Amended) A method of producing nucleic acid encoding a specific binding pair member, the method comprising:

(i) obtaining nucleic acid from a selected or screened particle obtained by a method according to claim 53, said nucleic acid encoding a polypeptide specific binding pair member or a polypeptide chain component thereof; and

032
CMT
Sub E 39
CMT

(ii) producing from the nucleic acid obtained in step (i) nucleic acid which encodes a derivative specific binding pair member, wherein said derivative specific binding pair member is [provided] produced by [the] addition, deletion, substitution or insertion of one or more amino acids, or by [the] linkage of another molecule, to a polypeptide specific binding pair member or polypeptide chain component thereof encoded by the nucleic acid obtained in step (i).

65. (Amended) A method of producing a specific binding pair member, the method comprising:
producing said derivative specific binding pair member by expression of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 64 [a said derivative specific binding pair member].

033

78. (Amended) A method of [obtaining] producing a member of a specific binding pair, the method comprising:
contacting a library of filamentous bacteriophage particles with a desired ligand,
wherein said filamentous bacteriophage particles display on their surface [as a fusion with a coat protein surface component] a polypeptide which is a specific binding pair member [with ability to bind] capable of binding a complementary ligand, and each filamentous bacteriophage particle contains genetic material including [the particles containing nucleic acid encoding said fusion, said] nucleic acid [including a sequence] encoding said polypeptide, which nucleic acid encoding the polypeptide is provided by mutation of nucleic acid encoding a specific binding pair member which compris[ing]es an enzyme or fragment thereof, which said enzyme or fragment thereof is able to bind a ligand of said enzyme and is at least 100 amino acids,

wherein said filamentous bacteriophage particles display a population of specific binding pair members, and

separating particles displaying specific binding pair members which bind to

said desired ligand.

79. (Amended) A method according to claim 78 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

80. (Amended) A method of [obtaining] producing a member of a specific binding pair, the method comprising:

contacting a library of filamentous bacteriophage particles with a desired ligand,

wherein said filamentous bacteriophage particles display on their surface [as a fusion with a coat protein surface component] a polypeptide which is a specific binding pair member [with ability to bind] capable of binding a complementary ligand, and each filamentous bacteriophage particle contains genetic material including [the particles containing nucleic acid encoding said fusion, said] said nucleic acid [including a sequence] encoding said polypeptide, which nucleic acid encoding the polypeptide is provided by mutation of nucleic acid encoding a specific binding pair member which compris[ing]es an enzyme or fragment thereof, which said enzyme or fragment thereof is able to bind a ligand of said enzyme and is at least 100 amino acids,

wherein said filamentous bacteriophage particles display a population of specific binding pair members, and

separating particles displaying specific binding pair members which have a desired enzymatic activity.

81. (Amended) A method according to claim 80 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

82. (Amended) A method of [obtaining] producing a member of a specific binding pair, the method comprising:

contacting a library of filamentous bacteriophage particles with a desired ligand,

wherein said filamentous bacteriophage particles display on their surface [as a fusion with a coat protein surface component] a polypeptide which is a specific binding pair member [with ability to bind] capable of binding a complementary ligand, and each filamentous bacteriophage particle contains genetic material including [the particles containing nucleic acid encoding said fusion, said] nucleic acid [including a sequence] encoding said polypeptide, which nucleic acid encoding the polypeptide is provided by mutation of nucleic acid encoding a specific binding pair member which compris[ing]es an enzyme or fragment thereof, which said enzyme or fragment thereof is able to bind a ligand of said enzyme and is at least 200 amino acids,

wherein said filamentous bacteriophage particles display a population of specific binding pair members, and

separating particles displaying specific binding pair members which bind to said desired ligand.

83. (Amended) A method according to claim 82 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

84. (Amended) A method of [obtaining] producing a member of a specific binding pair, the method comprising:

contacting a library of filamentous bacteriophage particles with a desired ligand,

wherein said filamentous bacteriophage particles display on their surface [as a fusion with a coat protein surface component] a polypeptide which is a specific binding pair member [with ability to bind] capable of binding a complementary ligand, and each filamentous bacteriophage particle contains genetic material including [the particles containing nucleic acid encoding said fusion, said] nucleic acid [including a sequence] encoding said polypeptide, which nucleic acid encoding the polypeptide is provided by

Q33
mutation of nucleic acid encoding a specific binding pair member which compris[ing]es an enzyme or fragment thereof, which said enzyme or fragment thereof is able to bind a ligand of said enzyme and is at least 200 amino acids,

wherein said filamentous bacteriophage particles display a population of specific binding pair members, and

separating particles displaying specific binding pair members which have a desired enzymatic activity.

85. (Amended) A method according to claim 84 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

Q34
87. (Amended) A method according to claim 86 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

Q35
89. (Amended) A method according to claim 88 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

Q36
91. (Amended) A method according to claim 90 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

Q37
93. (Amended) A method according to claim 92 wherein said [coat protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid protein surface component of phage fd or its counterpart in another filamentous phage.

Q38
95. (Amended) A method according to claim 94 wherein said [coat

038
cont'd
protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid
protein surface component of phage fd or its counterpart in another filamentous phage.

039
97. (Amended) A method according to claim 96 wherein said [coat
protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid
protein surface component of phage fd or its counterpart in another filamentous phage.

040
99. (Amended) A method according to claim 98 wherein said [coat
protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid
protein surface component of phage fd or its counterpart in another filamentous phage.

041
101. (Amended) A method according to claim 100 wherein said [coat
protein surface component is the] polypeptide is displayed as a fusion with a gene III capsid
protein surface component of phage fd or its counterpart in another filamentous phage.

102. (Amended) A method of producing nucleic acid encoding a specific
binding pair member, the method comprising:

(i) obtaining nucleic acid from a separated particle obtained by a
method according to claim 78, said nucleic acid encoding a first specific binding pair member
or a polypeptide chain component thereof; and

Sub E 40
(ii) producing from the nucleic acid obtained in step (i) nucleic acid
which encodes a derivative specific binding pair member, wherein said derivative specific
binding pair member is [provided] produced by [the] addition, deletion, substitution or
insertion of one or more amino acids, or by [the] linkage of another molecule, to said first
specific binding pair member or polypeptide chain component thereof encoded by the nucleic
acid obtained in step (i).

103. (Amended) A method of producing a specific binding pair member,
the method comprising:

producing said derivative specific binding pair member by expression

*Del
Antel*

of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 102 [a said derivative specific binding pair member].

104. (Amended) A method of producing nucleic acid encoding a specific binding pair member, the method comprising:

(i) obtaining nucleic acid from a separated particle obtained by a method according to claim 80, said nucleic acid encoding a first specific binding pair member or a polypeptide chain component thereof; and

(ii) producing from the nucleic acid obtained in step (i) nucleic acid which encodes a derivative specific binding pair member, wherein said derivative specific binding pair member is [provided] produced by [the] addition, deletion, substitution or insertion of one or more amino acids, or by [the] linkage of another molecule, to said first specific binding pair member or polypeptide chain component thereof encoded by the nucleic acid obtained in step (i).

*Sub 40
E
Cont*

105. (Amended) A method of producing a specific binding pair member, the method comprising:

producing said derivative specific binding pair member by expression of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 104 [a said derivative specific binding pair member].

106. (Amended) A method of producing nucleic acid encoding a specific binding pair member, the method comprising:

(i) obtaining nucleic acid from a separated particle obtained by a method according to claim 82, said nucleic acid encoding a first specific binding pair member or a polypeptide chain component thereof; and

(ii) producing from the nucleic acid obtained in step (i) nucleic acid which encodes a derivative specific binding pair member, wherein said derivative specific

binding pair member is [provided] produced by [the] addition, deletion, substitution or insertion of one or more amino acids, or by [the] linkage of another molecule, to said first specific binding pair member or polypeptide chain component thereof encoded by the nucleic acid obtained in step (i).

107. (Amended) A method of producing a specific binding pair member, the method comprising:

producing said derivative specific binding pair member by expression of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 106 [a said derivative specific binding pair member].

108. (Amended) A method of producing nucleic acid encoding a specific binding pair member, the method comprising:

(i) obtaining nucleic acid from a separated particle obtained by a method according to claim 84, said nucleic acid encoding a first specific binding pair member or a polypeptide chain component thereof; and

(ii) producing from the nucleic acid obtained in step (i) nucleic acid which encodes a derivative specific binding pair member, wherein said derivative specific binding pair member is [provided] produced by [the] addition, deletion, substitution or insertion of one or more amino acids, or by [the] linkage of another molecule, to said first specific binding pair member or polypeptide chain component thereof encoded by the nucleic acid obtained in step (i).

109. (Amended) A method of producing a specific binding pair member, the method comprising:

producing said derivative specific binding pair member by expression of nucleic acid produced according to the method of [by expression from encoding nucleic acid obtained by a method according to] claim 108 [a said derivative specific binding pair member].